We Claim:

1. A pagewidth color printhead assembly which comprises

an ink distribution arrangement;

a plurality of printhead chips which is mounted on the ink distribution arrangement to span a print medium feed path, each printhead chip comprising

a substrate that defines a plurality of ink supply channels; and

a plurality of ink-ejecting nozzles that is arranged on the substrate in fluid communication with the ink supply channels, the nozzles being arranged in groups, with each group of nozzles being in fluid communication with a respective ink supply channel and the groups of nozzles being arranged in at least three rows, each row of nozzles receiving ink of the same color.

2. A printhead assembly as claimed in claim 1, in which the groups of nozzles are arranged in first order sets of three rows of groups.

3. A printhead assembly as claimed in claim 1, in which the nozzles of each group are oriented in two rows so that the nozzles of a row of groups of nozzles generate two adjacent lines of print.

4. A printhead assembly as claimed in claim 3, in which the nozzles in each group are arranged in two nozzle rows which are offset with respect to each other so that one row of nozzles in a row of groups generates one of odd and even numbered dots of one line of print while the other row of nozzles generates the other of odd and even numbered dots of an adjacent line of print.

5. A printhead assembly as claimed in claim 1, in which the first order sets of groups are arranged in a number of second order sets of groups which themselves are arranged in a number of third order sets of groups which constitute each printhead chip.

6. A printhead assembly as claimed in claim 1, in which each nozzle incorporates a micro-electromechanical ink ejection mechanism to facilitate the ejection of ink drops.

7. A printhead assembly as claimed in claim 6, in which control circuitry is positioned on the substrate and is connected to the ink ejection mechanisms, the control circuitry being configured to provide the ink ejection mechanisms with necessary actuating signals.